



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,066	12/22/2004	Elmo Marcus Attila Diederiks	NL 020628	7327
24737 7590 05/07/2010 PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510				
EXAMINER PARK, EDWARD				
ART UNIT 2624		PAPER NUMBER		
MAIL DATE 05/07/2010		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/519,066

**Applicant(s)**

DIEDERIKS ET AL.

**Examiner**

EDWARD PARK

**Art Unit**

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. In view of the appeal brief filed on 4/30/08, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Samir A. Ahmed/

Supervisory Patent Examiner, Art Unit 2624

2. Claims 1-11 are currently pending.

***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

"The burden is on the USPTO to set forth a prima facie case of unpatentability. Therefore if the examiner determines that it is more likely than not that the claimed subject matter falls outside of all statutory categories, the examiner must provide an explanation."

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

**Claims 1, 4** are rejected under 35 U.S.C. 101 as not falling within one of the four statutory categories of invention. The Federal Circuit<sup>1</sup>, relying upon Supreme Court precedent<sup>2</sup>, has indicated that a statutory "process" under 35 U.S.C. 101 must (1) be tied to a particular

<sup>1</sup> *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

<sup>2</sup> *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

machine or apparatus, or (2) transform a particular article to a different state or thing. This is referred to as the “machine or transformation test”, whereby the recitation of a particular machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility (See *Benson*, 409 U.S. at 71-72), and the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity (See *Flook*, 437 U.S. at 590”). While the instant claim(s) recite a series of steps or acts to be performed, the claim(s) neither transform an article nor are positively tied to a particular machine that accomplishes the claimed method steps, and therefore do not qualify as a statutory process. That is, the method includes steps of receiving, presenting, analyzing, etc. is of sufficient breadth that it would be reasonably interpreted as a series of steps completely performed mentally, verbally, or without a machine. The cited claims do not positively recite any structure within the body of the claim which ties the claim to a statutory category. Furthermore, the examiner suggests that the structure needs to tie in the basic inventive concept of the application to a statutory category. Structure that ties insignificant pre or post solution activity to a statutory category is not sufficient in overcoming the 101 issue. Additionally, the limitations do not claim data that represents a physical object or substance, the data representing the physical object is not present and therefore can not be modified by the process in a meaningful or significant manner, and no meaningful and significant external, non-data depiction of a physical object or substance is produced. Thus, the limitations do not satisfy the transformation test.

<sup>1</sup> *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

<sup>2</sup> *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876).

**Claims 8, 9** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 8, 9 define a “system”. However, while the preamble defines a “system”, which would typically be indicative of an “apparatus”, the body of the claim lacks definite structure indicative of a physical apparatus. Furthermore, the specification indicates that the invention may be embodied as software (see pg. 7 paragraph 3 – pg. 8 of the specification, which states, “the system is described by means of example as a software system”, “several of these means can be embodied by one and the same item of computer readable software”). Therefore, the claim as a whole appears to be nothing more than a “system” of software elements, thus defining functional descriptive material per se.

Functional descriptive material may be statutory if it resides on a “computer-readable medium or computer-readable memory”. The claim(s) indicated above lack structure, and do not define a computer readable medium and are thus non-statutory for that reason (i.e., “When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized” – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The examiner suggests:

1. Amending the claim(s) to embody the program on “computer-readable medium” or equivalent; assuming the specification does define such medium and does NOT define the computer readable medium as a “signal”, “carrier wave”, or “transmission medium” which are deemed non-statutory; or

2. Adding structure to the body of the claim that would clearly define a statutory apparatus.

Any amendment to the claim should be commensurate with its corresponding disclosure.  
Note.

“A transitory, propagating signal ... is not a “process, machine, manufacture, or composition of matter.” Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” (In re Nuijten, 84 USPQ2d 1495 (Fed. Cir. 2007)).

Should the full scope of the claim as properly read in light of the disclosure encompass non-statutory subject matter such as a “signal”, the claim as a whole would be non-statutory. Should the applicant’s specification define or exemplify the computer readable medium or memory (or whatever language applicant chooses to recite a computer readable medium equivalent) as statutory tangible products such as a hard drive, ROM, RAM, etc, as well as a non-statutory entity such as a “signal”, “carrier wave”, or “transmission medium”, the examiner suggests amending the claim to include the disclosed tangible computer readable storage media, while at the same time excluding the intangible transitory media such as signals, carrier waves, etc.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 4, 9** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim calls for the element “at least two ambient sources that is closer to the presentation device than any other of the at least two ambient light sources”. One ordinary skill in the art would interpret this claim limitation as setting at least two ambient light sources. Is the setting the ambient light changing at least two ambient light sources? Is the setting the ambient light changing at least one of the at least two ambient light sources? What is considered “other of the at least two ambient light sources”? Is it any light source other than the at least two ambient light sources? Is it one of the ambient light sources of the at least two ambient light sources? The scope of protection is unclear, and the claim is therefore indefinite. The examiner will interpret the claim limitation as reasonably broad as possible. The interpretation of the claim limitation is setting the property of any ambient light source associated with the presentation device. Correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an



international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 4, 6, 7, 8, 9, 11** are rejected under 35 U.S.C. 102(b) as being anticipated by Tao (WO 97/42756). Tao 2 (US 6,549,239 B1) is an equivalent of Tao (WO 97/42756) and will be referred to hereon as a substitute for the WO publication.

Regarding **claim 1**, Tao 2 teaches a method of controlling at least one ambient light source, the method comprising the steps of:

receiving a video signal by a receiver (see fig. 2, col. 5, lines 59-67; video buffer/FIFO memory 9 receives digital video data from the A/D converter 4 and stores them before sending them to the interface bus 14. Since the PSCCD 2 may be continuously sending data, this memory buffers the data so that the data are not lost before they are acquired by the interface bus 14); and

presenting the video signal by a presentation device (see col. 2, lines 10-21; a video imaging system outputting a digital video signal which can interface bidirectionally with external digital devices, such as an external display controller for displaying the digital signal or other external circuitry for updating programs and parameters),

characterized in that the method further comprises the steps of:

analyzing the video signal to determine optical properties of an image to be formed by the video signal (see col. 2, lines 40—col. 3, lines 22; digital video data set corresponding to a video image of the object, determining a histogram and a cumulative distribution function of brightness levels of the digital video image signal, determining a change in lighting conditions in response to the digital video image signal); and

setting a property of ambient light generated by said at least one ambient light source based upon

the determined optical properties (see col. 2, lines 40—col. 3, lines 22; automatically adjusting the intensity of the illumination source and the effective shutter speed, in response to a determined changed lighting conditions as a function of the histogram and cumulative distribution function).

Regarding **claim 4 (as best understood)**, Tao 2 teaches a method of controlling at least two ambient light sources, the method comprising the steps of:

receiving a video signal by a receiver (see fig. 2, col. 5, lines 59-67; ideo buffer/FIFO memory 9 receives digital video data from the A/D converter 4 and stores them before sending them to the interface bus 14. Since the PSCCD 2 may be continuously sending data, this memory buffers the data so that the data are not lost before they are acquired by the interface bus 14); and

presenting the video signal by a presentation device (see col. 2, lines 10-21; a video imaging system outputting a digital video signal which can interface bidirectionally with external digital devices, such as an external display controller for displaying the digital signal or other external circuitry for updating programs and parameters), characterized in that the method further comprises the steps of:

analyzing the video signal to determine optical properties of an image to be formed by the video signal (see col. 2, lines 40—col. 3, lines 22; digital video data set corresponding to a video image of the object, determining a histogram and a cumulative distribution function of brightness levels of the digital video image signal, determining a change in lighting conditions in response to the digital video image signal); and  
setting a property of ambient light generated by said at least two ambient light sources based upon the determined optical properties, wherein the method comprises setting the property of the

ambient light generated by the ambient light source of the at least two ambient light sources that is closer to the presentation device than any other of the at least two ambient light sources (see col. 2, lines 40-col. 3, lines 22, col. 5, lines 10-35; automatically adjusting the intensity of the illumination source and the effective shutter speed, in response to a determined changed lighting conditions as a function of the histogram and cumulative distribution function; n array of LEDs arranged to give an even field of light at the subject distance. The LEDs are pulsed to give a strobe-like effect. One preferred embodiment of the LED array comprises 8 LEDs, emitting at 640 nm wavelength, arranged in a ring or other formation as suitable for the application).

Regarding **claim 6**, Tao 2 teaches setting the property of the ambient light is configurable (col. 2, lines 20-40).

Regarding **claim 7**, Tao 2 teaches setting the property of the ambient light is configurable by a user preference (see col. 1, lines 15-42).

Regarding **claim 8**, Tao 2 discloses a system for controlling at least one ambient light source, the system comprising:  
receiving means for receiving a video signal (see fig. 2, col. 5, lines 59-67; ideo buffer/FIFO memory 9 receives digital video data from the A/D converter 4 and stores them before sending them to the interface bus 14. Since the PSCCD 2 may be continuously sending data, this memory buffers the data so that the data are not lost before they are acquired by the interface bus 14); and  
translation means for translating the video signal into a displayable signal to be displayed by a presentation device (see col. 2, lines 10-21; a video imaging system outputting a digital video

signal which can interface bidirectionally with external digital devices, such as an external display controller for displaying the digital signal or other external circuitry for updating programs and parameters), characterized in that the system further comprises: processing means for analyzing the received video signal to determine optical properties of an image to be formed by the video signal (see col. 2, lines 40—col. 3, lines 22; digital video data set corresponding to a video image of the object, determining a histogram and a cumulative distribution function of brightness levels of the digital video image signal, determining a change in lighting conditions in response to the digital video image signal), and for setting a property of ambient light generated by the at least one ambient light source based upon the determined optical properties (see col. 2, lines 40-col. 3, lines 22; automatically adjusting the intensity of the illumination source and the effective shutter speed, in response to a determined changed lighting conditions as a function of the histogram and cumulative distribution function).

Regarding **claim 9 (as best understood)**, Tao 2 discloses a system of controlling at least two ambient light sources, the system comprising: receiving means for receiving a video signal (see fig. 2, col. 5, lines 59-67; video buffer/FIFO memory 9 receives digital video data from the A/D converter 4 and stores them before sending them to the interface bus 14. Since the PSCCD 2 may be continuously sending data, this memory buffers the data so that the data are not lost before they are acquired by the interface bus 14); and translation means for translating the video signal into a displayable signal to be displayed by a presentation device (see col. 2, lines 10-21; a video imaging system outputting a digital video signal which can interface bidirectionally with external digital devices, such as an external

display controller for displaying the digital signal or other external circuitry for updating programs and parameters), characterized in that the system further comprises:

processing means for analyzing the received video signal to determine optical properties of an image to be formed by the video signal (see col. 2, lines 40—col. 3, lines 22; digital video data set corresponding to a video image of the object, determining a histogram and a cumulative distribution function of brightness levels of the digital video image signal, determining a change in lighting conditions in response to the digital video image signal), and

for setting a property of ambient light generated by the at least two ambient light sources based upon the determined optical properties, wherein the processing means sets the property of the ambient light of the ambient light source of the at least two ambient light sources that is closer to the presentation device than any other of the at least two ambient light sources (see col. 2, lines 40—col. 3, lines 22, col. 5, lines 10-35; automatically adjusting the intensity of the illumination source and the effective shutter speed, in response to a determined changed lighting conditions as a function of the histogram and cumulative distribution function; n array of LEDs arranged to give an even field of light at the subject distance. The LEDs are pulsed to give a strobe-like effect. One preferred embodiment of the LED array comprises 8 LEDs, emitting at 640 nm wavelength, arranged in a ring or other formation as suitable for the application).

Regarding **claim 11**, Tao 2 teaches a lighting unit comprising a light armature (see col. 5, lines 10-35) and the system as claimed in claim 8 (see rejection of claim 8).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 2, 3** are rejected under 35 U.S.C. 103(a) as being unpatentable over by Tao (WO 97/42756) in view of Ludwig (US 6,689,947 B2). Tao 2 (US 6,549,239 B1) is an equivalent of Tao (WO 97/42756) and will be referred to hereon as a substitute for the WO publication.

Regarding **claims 2, 3**, Tao 2 discloses all elements as mentioned above in claim 1. Tao 2 does not disclose face recognition and facial expression recognition.

Ludwig teaches face recognition and facial expression recognition (see col. 32, lines 1-9 recognition of human facial expressions from video images have allowed the ability for the human face to be used as a controller for lighting).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify the Tao 2 reference to utilize face recognition and facial expression recognition as taught by Ludwig, to enhance the dynamics and functionality of the lightening system by providing a deeper integration of visual environment by continuously controlling light effects in reference to certain trigger events (see col. 31, lines 30-col. 32, line 9).

10. **Claims 5, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over by Tao (WO 97/42756) in view of Lys et al (US 6,166,496).

Regarding **claim 5**, Tao 2 discloses all elements as mentioned above in claim 4. Tao 2 does not disclose setting the property of the ambient light is substantially synchronous with presentation of the video signal by the presentation device.

Lys, in the same field of endeavor, teaches setting the property of the ambient light is substantially synchronous with presentation of the video signal by the presentation device (Lys: col. 48, lines 1-26, col. 49, lines 56-64).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Tao 2 to utilize synchronization as taught by Lys, to enhance the dynamics of a video signal by allowing a wide variety of effects that enhance visual effects during certain television or movie scenes (see col. 48, lines 1-26).

Regarding **claim 10**, Tao 2 discloses all elements as mentioned above in claim 4. Tao 2 does not disclose synchronization means for synchronizing the presentation of the display signal on the presentation device with setting the property of the ambient light.

Lys, in the same field of endeavor, teaches synchronization means for synchronizing the presentation of the display signal on the presentation device with setting the property of the ambient light (Lys: col. 48, lines 1-26, col. 49, lines 56-64).

It would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Tao 2 to utilize synchronization as taught by Lys, to enhance the dynamics of a video signal by allowing a wide variety of effects that enhance visual effects during certain television or movie scenes (see col. 48, lines 1-26).

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDWARD PARK whose telephone number is (571)270-1576. The examiner can normally be reached on M-F 10:30 - 20:00, (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Edward Park  
Examiner  
Art Unit 2624

/Edward Park/  
Examiner, Art Unit 2624

/Samir A. Ahmed/  
Supervisory Patent Examiner, Art Unit 2624